REMARKS

An additional copy of the rewritten claims, marked up to show the amendments, is attached hereto in a separate paper entitled "§1.121(c)(1)(ii) ATTACHMENT A TO AMENDMENT".

In Sections 2 and 3 of the Action, claims 1-14 were rejected as being unpatentable over "Taylor" (US 5,938,309) in view of "Mizrahi" (US 6,069,719). However, the cited references do not disclose or teach the claimed invention.

For example, Section 2 of the Action concedes that "Taylor fails to teach that the information transmitted at a first bit transmission rate and first signal power to a first receiver without regeneration would require at least one of electrical regeneration and optical regeneration to reach a second receiver". In fact, Taylor teaches away from the claimed invention, because it describes and teaches that systems operate better at the same data rate than with different data rates, which is contrary to the claimed invention. Therefore, the mere fact that regeneration was known does nothing to overcome the deficiencies of the point-to-point systems taught by Taylor.

One of the advantages of the claimed invention is that the precise point-to-point transmission restrictions imposed by Taylor and others are not required. As such, the present invention provides for systems in which optical paths can be established free from the restrictions on data rates and architectures taught by the prior art and can be deployed to meet the actual traffic demands placed on a network. For example, claims 7 and 8 include the use of inverse multiplexing to introduce bit transmission rates for channels in the system, which is completely contrary to the process described in Taylor[1].

Claims 1 and 11 have been amended to more clearly set forth the aforementioned distinctions between the claimed invention and the prior art. Specifically, the claimed system is configured to support different first and second transmission rates and signal

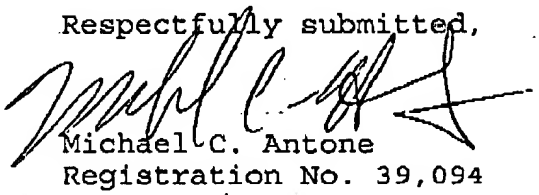
[1] Applicant notes that the term "inverse multiplexing" is not used in the Taylor patent.

powers that allow for transmission to first and second receivers at different destinations without regeneration.

Mizrahi, as noted in the Action, discloses and teaches various optical add-drop multiplexer embodiments and does not disclose or suggest any teaching that would reverse the contrary teachings of Taylor with regard to independent claims 1 and 11. In addition, the Action rejects claims 9 and 10 citing Taylor and Mizrahi; however, these references fail to teach the additional limitations including combining system and communication traffic on the same signal wavelength in these dependent claims. Nor do the references further suggest combining signals carrying system and communication information with signals carrying only communications traffic. Taylor and Mizrahi merely teach the prior art of providing communication overhead bits in communication channels and a separate system channel. The insufficiency of the teachings in Taylor and Mizrahi is presumably because the claimed inventions were not contemplated by those references, either alone or in combination along with the other cited references.

Applicants respectfully request that the rejections be withdrawn and the claims be passed to allowance. Applicants believe that no additional fees are due with this response. However, the Commissioner is authorized to charge any fees, including those under 37 CFR 1.16 and 1.17, necessitated by this amendment and credit any overpayments to Deposit Account No. 500477.

Respectfully submitted,



Michael C. Antone
Registration No. 39,094

Corvis Corporation
7015 Albert Einstein Drive
Columbia, MD 21046-9400
(443) 259-4150

January 10, 2003

Ser No. 09/441,805 Attachment A

§1.121(c)(1)(ii) ATTACHMENT A TO AMENDMENT

1. (Amended) A wavelength division multiplexed optical system comprising:

a plurality of optical transmitters, each transmitter configured to transmit information at via at least one signal wavelength at a bit transmission rate and signal power, and wherein at least one transmitter transmits information at a first transmission rate and signal power and at least one other transmitter transmits information at a second transmission rate and signal power and the second bit transmission rate and second signal power are selected such that at least one of the following conditions: the second bit transmission rate is less the first bit transmission rate and the second signal power is greater than the first signal power, are met; and,

a plurality of optical receivers, each receiver configured to the receive information transmitted via at least one of the at least one optical wavelengths, wherein the at least one signal wavelength and bit transmission rate of each of said plurality of transmitters is selected to allow for the transmission of the information via the signal wavelength to at least a corresponding one of said plurality of said receivers without regeneration, wherein information transmitted at [a] the first bit transmission rate and first signal power to a first receiver without regeneration would require at least one of electrical regeneration and optical regeneration to reach a second receiver, which is configured to receive information at a second bit transmission rate and second signal power at a different destination than said first receiver without regeneration.

11. (Amended) A method of transmitting information in an optical system comprising:

providing an optical path including at least first and second optical receivers at different destinations, the first and second receivers being configured to receive at least one signal wavelength from the optical path;

transmitting first information via a first signal wavelength at a first bit transmission rate and first signal power sufficient to be received by the first optical receiver without regeneration; and,

transmitting second information via a second signal wavelength at a second bit transmission rate and second signal power sufficient to be received by the second optical receiver without regeneration, wherein the second bit transmission rate and second signal power are selected such that at least one of the following conditions: second bit transmission rate is less the first bit transmission rate and the second signal power is greater than the first signal power, are met and transmitting information at the first bit transmission rate and first signal power to the second receiver would require at least one of electrical regeneration and optical regeneration.